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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/177,837	10/23/1998	MICHAEL BURNETT	00167/318001	3644

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EXAMINER

WHIPKEY, JASON T

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 10/23/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/177,837

Applicant(s)

BURNETT ET AL.

Examiner

Jason T. Whipkey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 11 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR § 1.114***

1. A request for continued examination under 37 CFR § 1.114, including the fee set forth in 37 CFR § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR § 1.114, and the fee set forth in 37 CFR § 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR § 1.114. Applicant's submission filed on August 12, 2003, has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground of rejection.

### ***Drawings***

3. The proposed drawing correction filed on December 11, 2002, has been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

***Claim Objections***

4. Claim 1 is objected to because the word "identified" is misspelled as "indentified" on line 5. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6-10, 12-15, 17-21, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Buchin (U.S. Patent No. 5,475,420).

Regarding claims 1, 7, 13, and 18, Buchin discloses an image processing system for use with an endoscope. The image processing electronics are shown in the block diagram in Figure 3A. Digital signal processor 153 ("image size detection circuitry") determines the location of the active image data within the entire image data captured by CCD array 151 ("an image sensor") (column 10, lines 55-60). DSP 153 provides a signal for controlling the automatic shutter system, which may be an electronic shutter (column 19, line 50), in accordance with the detected actual image area (column 3, lines 58-64).

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Regarding claims 2, 8, 14, and 19, Buchin teaches that DSP 153 can retrieve preset image boundary parameters ("predefined shutter response areas") stored in a table (column 11, lines 4-7). Plural sets of parameters may be stored (column 11, lines 20-24). As described above, DSP 153 provides a signal for controlling the electronic shutter in accordance with the detected actual image area (column 3, lines 58-64).

Regarding claims 3, 9, and 20, Buchin shows in Figure 3A that the image processing system includes digital signal processor 153 ("a processor"), ROM 177, and RAM 157 ("a memory").

Regarding claims 4, 10, 15, and 21, Buchin teaches that the luminance component of the image signal is used to determine the location of the actual image (column 13, lines 43-49).

Regarding claims 6, 12, 17, and 23, Buchin teaches that a plurality of pixels are formed on CCD array 151 (column 10, lines 55-60).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 5, 11, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchin.

Claims 5, 11, 16, and 22 may be treated like claims 1, 7, 13, and 18, respectively. Additionally, DSP 153 acts as a comparator by calculating the boundary of the actual image area (column 16, lines 17-18). DSP 153 also acts as an integrator by using the result to store only the valid pixels in frame store 155 (column 17, lines 35-40). Finally, the processing circuitry includes analog-to-digital converter 183.

Buchin is silent with regard to performing the above calculations in analog form and using the result to digitize the actual image area.

Official Notice is taken that calculations may be performed by either analog or digital circuitry. An advantage to performing the calculations in analog format and using the result to digitize the actual image data is that a smaller digital memory is required, since only the relevant pixels need to be stored. For this reason, it would have been

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obvious at the time of invention to have Buchin locate the actual image area using analog calculation circuitry.

**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason T. Whipkey, whose telephone number is (703) 305-1819. The examiner can normally be reached Monday through Friday from 9 A.M. to 6:30 P.M. eastern daylight time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 306-0377.

JTW

JTW

October 17, 2003



TUAN HO  
PRIMARY EXAMINER